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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,296	12/08/2003	Steve W. Smock	1007-0584	2191

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EXAMINER

LUGO, CARLOS

ART UNIT

PAPER NUMBER

3676

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/730,296	Applicant(s) SMOCK ET AL.	
	Examiner Carlos Lugo	Art Unit 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-20 is/are allowed.
- 6) ☒ Claim(s) 1-14 and 21-24 is/are rejected.
- 7) ☒ Claim(s) 15-17 and 25-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This Office Action is in response to applicant's amendment filed on March 14, 2005.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 11-14 and 21-24 are rejected** under 35 U.S.C. 103(a) as being unpatentable over US Pat No 4,796,932 to Tame.

Regarding claims 11 and 21, Tame discloses a lock mechanism comprising a mounting plate (22 and 115) mounted to a frame (12).

The lock mechanism further comprises a latch (74) mounted to the mounting plate for movement about a pivot axis (31) and rotatable about the pivot axis between an unlatched and latched position. The latch includes a follower surface (118) offset from the pivot axis.

A blocker (40) is selectable movable into a blocking position when the latch is in a latched position (Figure 5) for interlocking with the rotation of the latch such that the latch is locked into the latched position for locking a door in a closed position.

An electromechanical actuator (138) is mounted to a base plate (Figure 1). The actuator moves the blocker (40) and wherein movement of the blocker into the blocking position induces additional movement of the latch to pull the door closer to

the frame (indirectly when the blocker 40 moves to a position wherein the lobe 54 hit the switch 116 and blocks the movement of the latch, Col. 4 Lines 7-34).

However, Tame fails to disclose that an actuator pin is at the mounted plate so that an end extends beyond the mounting plate. Tame discloses an actuator pin (18) that is supported at the door instead of at the frame.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the actuator pin supported and extending from the frame, instead extending from the door, because the reversal of components in a prior art is considered as a design consideration that will not affect the mechanism of the lock.

As to claims 12 and 22, Tame disclose that the actuator (138) comprises a motor.

As to claims 13 and 23, Tama fails to disclose that the blocker is rotated 60° or less. Tame illustrates that the angle difference between the lobes 52 and 54 is about 120°.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the claimed quantitative value (60°), since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

As to claims 14 and 24, Tame discloses that the mounting plate includes a front and rear mounting plates (22 and 115).

Allowable Subject Matter

4. **Claims 18-20 are allowed.**
5. **Claims 15,25 and 28 are objected to** as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 16,17,26,27,29 and 30 would also be allowed because the claims depend from claims 15,25 and 28 respectively.

Reasons For Allowance

6. The following is an examiner's statement of reasons for allowance:

Claim 18 is allowable over the prior art of record and claims 15,25 and 28 present allowable subject matter over the prior art of record because the teachings of the references taken as a whole do not teach or render obvious the combination set forth, including that the lock mechanism further comprises a lever or blockable member that is couple to the latch.

Tame (US 4,796,932) fails to disclose that the lock mechanism further comprises a lever or blockable member that is couple to the latch.

Phillips (US 6,079,756) discloses a lock mechanism comprising a mounting plate (30) mounted to a frame and a latch (4) mounted to the mounting plate for movement about a pivot axis (at 36) and rotatable about the pivot axis between an unlatched and latched position. The latch includes a follower surface (46) offset from the pivot axis.

An actuator pin (60), movably supported by the mounting plate, includes an outer end (64) extending beyond the mounting plate for engaging the oven door (14) upon closure and a cam end (68) engaging the follower surface for rotating the latch into the latched position wherein the door is adapted to be captured by the latch.

A blocker (86) is selectable movable into a blocking position when the latch is in a latched position for interfering with the rotation of the latch such that the latch is locked into the latched position for locking the oven door in a closed position.

An electromechanical actuator (82) is adapted to move the blocker.

However, Phillips fails to disclose that movement of the blocker into the blocking position induces additional movement of the latch to pull the oven door closer to the frame. Phillips discloses that the blocker (86) is used only to block the rotation of the latch, not to impart additional movement to the latch.

Arute (US 4,593,945) discloses an oven lock mechanism comprising a mounting plate (10); a latch (24) that includes a follower surface (30) offset from the latch pivot axis; an actuator pin (28); a blocker (26); and an electromechanical actuator (29).

However, Arute fails to disclose that movement of the blocker into the blocking position induces additional movement of the latch to pull the oven door closer to the frame.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

7. Applicant's arguments filed on March 14, 2005 have been fully considered but they are not persuasive.

Although the examiner by mistake point out that the actuator pin presented by Tame was element 16, instead of element 18, any ordinary skill in the art, if the examiner mentions that the follower surface in the device described by Tame is element 118 and if the claim recites that the actuator pin will engage the follower surface, would know and understand that the pin referring to is element 18 and not the striker 16. However, in order to "clarify" the applicant, Tame discloses an actuator pin 18 that engages a follower surface 118. The only difference is that the actuator pin is not located at the frame with the latch; Tame discloses that the actuator pin 18 is located at the door so as to engage the follower surface 118 in order to activate the latch.

It would be obvious to one having ordinary skill in the art to have the actuator pin extending from the frame instead of the door, because the reversal of components, having the actuator pin 18 extending from the frame 12, instead of from the door, in a prior art reference, where there is no disclosed significance to such reversal, is a design consideration within the skill of the art.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lugo whose telephone number 571-272-7058. The examiner can normally be reached on 9-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5771.

C.L.
Carlos Lugo
AU 3676

May 9, 2005.



DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600